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(FILE 'HOME' ENTERED AT 15:33:18 ON 07 APR 2000)

FILE 'CAPLUS' ENTERED AT 15:33:21 ON 07 APR 2000

L1 3703 S BECKMAN?  
L2 3622 S METHANESUL? ACID  
L3 3417 S METHANESULFONIC ACID  
L4 1 S METHANESULPHONIC ACID  
L5 3417 S L3 OR L4  
L6 3417 S L2 AND L5  
L7 7 S L5 AND L1

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	26.03	26.18
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-3.90	-3.90

STN INTERNATIONAL LOGOFF AT 15:35:48 ON 07 APR 2000

L7 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2000 ACS  
AN 2000:209669 CAPLUS  
TI Process for the preparation of lactams from the corresponding  
cycloalkanone oximes  
IN Ollivier, Jean  
PA Elf Atochem S.A., Fr.  
SQ Eur. Pat. Appl., 5 pp.  
CODEN: EPXXDW  
DT Patent  
LA French  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 989117	A1	20000329	EP 1999-402107	19990824
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2000095757	A2	20000404	JP 1999-267015	19990921
PRAI	FR 1998-11733		19980921		
AB	C6-12 lactams such caprolactam are manufd. by <b>Beckmann</b> reaction of cycloalkanone oximes at 120-180.degree. in presence of 10-40% <b>methanesulfonic acid</b> based on oxime.				

L7 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2000 ACS

AN 1995:75117 CAPLUS

DN 122:8288

TI Determination of methionine sulfoxide in biological materials using HPLC and its degradability in the rumen of cattle

AU Puchala, R.; Pior, Hanna; von Keyserlingk, Marina; Shelford, J.A.; Barej, W.

CS Department of Animal Physiology, Warsaw Agricultural University, Warsaw, 02 766, Pol.

SO Anim. Feed Sci. Technol. (1994), 48(1-2), 121-30

CODEN: AFSTDH; ISSN: 0377-8401

DT Journal

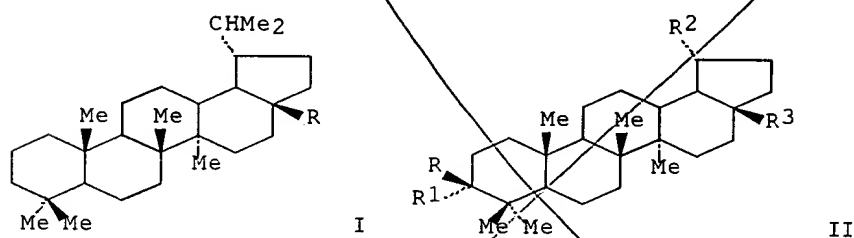
LA English

AB A method was developed for estg. concns. of methionine sulfoxide, methionine and other amino acids in feed protein using reverse phase high performance liq. chromatog. This incorporated pre-column o-phthaldialdehyde (OPA) derivatization and fluorometric detection. Samples were hydrolyzed prior to anal. using 4 M **methanesulfonic acid** contg. 0.2% 3-(2-aminoethyl) indole (tryptamine) under vacuum at 120.degree.C for 17 h. Hydrolyzates were dild., adjusted to pH 7 and filtered. A Beckman 507 autosampler with a precolumn derivatization cassette was used for the derivatization process. Fluorometric detection (excitation 338 nm and emission 425 nm) was used to measure OPA derivs. Samples were prepd. such that on column concn. was in the 10-200 pmole range. The mean recovery of the std. soln. added to the feed samples was 96.8 +/- 1.4% for seven tested feeds. Reproducibility of the method was evaluated by analyzing eight grass hay samples (0.39 +/- 0.21 mg g-1 DM) and eight alfalfa hay samples that had been incubated for 96 h in the rumen (0.14 +/- 0.09 mg g-1 DM). Relative std. deviations were 2.74% and 2.97%, resp. The use of **methanesulfonic acid** as a hydrolyzing agent for feed protein, allowed for higher recovery of total methionine when compared with hydrochloric acid with or without sample oxidn. (108.5%). The rumen degradability of protein from grass hay decreased as the amt. of methionine sulfoxide increased.

L7 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2000 ACS  
AN 1993:495365 CAPLUS  
DN 119:95365  
TI Preparation of amides from oximes  
IN Narasaka, Koichi; Sato, Hiroshi  
PA Sumitomo Chemical Co, Japan  
SO Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 05051366	A2	19930302	JP 1991-213554	19910826
OS	CASREACT 119:95365				
AB	Amides are prepd. by rearrangement of oximes in the presence of perrhenate salts and strong acids or their derivs. Cyclohexanone oxime was refluxed with tetetrabutylammonium perrhenate (I) and p-toluenesulfonic acid monohydrate (II) in ClPh for 2 h to give 31.9% .epsilon.-caprolactam, vs. 3.4% and 4.9%, without I and II, resp.				

L7 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2000 ACS  
AN 1991:429682 CAPLUS  
DN 115:29682  
TI The synthesis of nor- and bisnorlupanes  
AU Wanhhab, Amal; Ottosen, Margaret; Bachelor, Frank W.  
CS Dep. Chem., Univ. Calgary, Calgary, AB, T2N 1N4, Can.  
SO Can. J. Chem. (1991), 69(3), 570-7  
CODEN: CJCHAG; ISSN: 0008-4042  
DT Journal  
LA English  
OS CASREACT 115:29682  
GI



AB In studies on geochem. biomarkers, a series of lupane stds. were required. An efficient synthesis of lupane (I; R = Me) in three steps from betulin (II; R = OH, R<sub>1</sub> = H, R<sub>2</sub> = CMe:CH<sub>2</sub>, R<sub>3</sub> = CH<sub>2</sub>OH) in an overall yield of 47.2% is reported. 17.β.(H)-28-norlupane (I; R = H) was obtained in 90% purity employing Barton's method for the decarboxylation of 3-oxolupan-28-oic acid II (RR<sub>1</sub> = O, R<sub>2</sub> = CHMe<sub>2</sub>, R<sub>3</sub> = H). 24,28-Bisnorlupane and 24-norlupane were obtained by a series of reactions involving formation of the oxime, the seconitrile, the epoxynitrile, ring closure, and finally a Wolff-Kishner redn. of the C(3) carbonyl to the methylene. Also, to aid in the quant. detn. of these lupanes from oil shales and geol. samples, 3-deuterolupane and 2,3-dideuterolupane were needed, and a method for their prepn. is reported.

L7 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2000 ACS  
 AN 1987:477652 CAPLUS  
 DN 107:77652  
 TI Preparation of lactams with 8 to 15 carbon atoms from the corresponding oximes  
 IN Rademacher, Hans; Voges, Heinz-Werner  
 PA Huels A.-G., Fed. Rep. Ger.  
 SO Ger. Offen., 5 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3538859	A1	19870507	DE 1985-3538859	19851102
	EP 225974	A2	19870624	EP 1986-112164	19860903
	EP 225974	A3	19890222		
	R: CH, DE, FR, GB, IT, LI				
	US 4689412	A	19870825	US 1986-919466	19861016
	JP 62108861	A2	19870520	JP 1986-258657	19861031
PRAI	DE 1985-3538859		19851102		

AB A procedure for prepg. C8-15 lactams by **Beckmann** rearrangement of the corresponding cyclic oximes with 0.5-10 wt.%, based on the oxime, of an acid chloride (sic) as catalyst at 140.degree. in a soln. of an org. solvent, was characterized in that anhydrides of org. sulfonic acids or of H2SO4 half-esters or mixed anhydrides of org. sulfonic acids and H2SO4 half-esters are used. Lactams prepd. according to the invention are halogen-free. Halogens in lactams cause problems converting into polyamides and products prepd. therefrom. Cyclododecanone oxime in PhMe was treated with (PhSO2)2O in PhMe at 95.degree., whereupon the mixt. refluxed 5 min to give >99% yield laurin lactam with 100% conversion of oxime and no Cl impurities. Using SOCl2 instead of (PhSO2)2O gave laurin lactam with .gtoreq.100 ppm Cl.

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L7 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2000 ACS  
AN 1980:54389 CAPLUS  
DN 92:54389  
TI An accelerated, improved single-column procedure for the amino acid  
analysis of basement membrane and collagen-like proteins  
AU Vergnes, Jean Paul; Freeman, Ian L.  
CS Sch. Med., Univ. Pittsburgh, Pittsburgh, PA, 15213, USA  
SO Anal. Biochem. (1979), 99(2), 427-33  
CODEN: ANBCA2; ISSN: 0003-2697  
DT Journal  
LA English  
AB The methodol. is designed for use on the **Beckman** 121-M  
microcolumn amino acid analyzer. Excellent analyses of imino acids and  
amino acids including tryptophan, as well as the amino sugars glucosamine  
and galactosamine, can be obtained at the same time if the protein is  
hydrolyzed with 3N **methanesulfonic acid**. This  
methodol. is suitable for hydrolyzates from reduced and alkylated  
basement membrane collagen as well as performic acid oxidized basement  
membrane collagen and similar collagen-like materials.

L7 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2000 ACS  
AN 1974:14605 CAPLUS  
DN 80:14605  
TI Phosphorus pentoxide-**methanesulfonic acid**. Convenient  
alternative to polyphosphoric acid  
AU Eaton, Philip E.; Carlson, Glenn R.; Lee, James T.  
CS Dep. Chem., Univ. Chicago, Chicago, Ill., USA  
SO J. Org. Chem. (1973), 38(23), 4071-3  
CODEN: JOCEAH  
DT Journal  
LA English  
AB A new reagent composed of a 1:10 mixture by wt. of P2O5 in Me-SO3H is  
suggested as an attractive alternative to polyphosphoric acid (PPA).  
Product yields in the prepn. of cyclopentenones via the intramol.  
acylation of .gamma.-lactones and in the prepn. of amides via the  
**Beckmann** rearrangement compare favorably with the best yields  
reported for the same transformations done in PPA. The new reagent is  
very much more convenient to handle than PPA.